



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/901,484A

DATE: 03/05/2002

TIME: 10:08:34

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

3 <110> APPLICANT: Cohen, Daniel
 4 Blumenfeld, Marta
 5 Chumakov, Ilya
 6 Bougueleret, Lydie
 8 <120> TITLE OF INVENTION: Prostate Cancer Gene
 10 <130> FILE REFERENCE: GEN-T111XC3D2
 12 <140> CURRENT APPLICATION NUMBER: US 09/901,484A
 13 <141> CURRENT FILING DATE: 2001-07-09
 15 <150> PRIOR APPLICATION NUMBER: US 08/996,306
 16 <151> PRIOR FILING DATE: 1997-12-22
 18 <150> PRIOR APPLICATION NUMBER: US 60/099,658
 19 <151> PRIOR FILING DATE: 1998-09-09
 21 <150> PRIOR APPLICATION NUMBER: US 09/218,207
 22 <151> PRIOR FILING DATE: 1998-12-22
 24 <150> PRIOR APPLICATION NUMBER: US 09/338,907
 25 <151> PRIOR FILING DATE: 1999-06-23
 27 <150> PRIOR APPLICATION NUMBER: US 09/853,526
 28 <151> PRIOR FILING DATE: 2001-05-11
 30 <160> NUMBER OF SEQ ID NOS: 578
 32 <170> SOFTWARE: PatentIn version 3.1
 34 <210> SEQ ID NO: 1
 35 <211> LENGTH: 56516
 36 <212> TYPE: DNA
 37 <213> ORGANISM: Homo sapiens
 39 <220> FEATURE:
 40 <221> NAME/KEY: promoter
 41 <222> LOCATION: (1629)..(1870)
 42 <223> OTHER INFORMATION: identification method Proscan
 43 <220> FEATURE:
 44 <221> NAME/KEY: misc_feature
 45 <222> LOCATION: (1998)..(2000)
 46 <223> OTHER INFORMATION: potential start codon
 51 <220> FEATURE:
 52 <221> NAME/KEY: misc_feature
 53 <222> LOCATION: (2001)..(2216)
 54 <223> OTHER INFORMATION: exon 1
 57 <220> FEATURE:
 58 <221> NAME/KEY: misc_feature
 59 <222> LOCATION: (11994)..(14332)

ENTERED

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/901,484A

TIME: 10:08:34

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

66 <223> OTHER INFORMATION: Tyr Phos
 69 <220> FEATURE:
 70 <221> NAME/KEY: primer_bind
 71 <222> LOCATION: (11930)..(11947)
 72 <223> OTHER INFORMATION: upstream amplification primer 4-77 SEQ ID 42
 75 <220> FEATURE:
 76 <221> NAME/KEY: allele
 77 <222> LOCATION: (12057)..(12103)
 78 <223> OTHER INFORMATION: polymorphic fragment 4-77 SEQ ID 24
 81 <220> FEATURE:
 82 <221> NAME/KEY: primer_bind
 83 <222> LOCATION: (12339)..(12358)
 84 <223> OTHER INFORMATION: downstream amplification primer 4-77 SEQ ID 51, complement
 87 <220> FEATURE:
 88 <221> NAME/KEY: primer_bind
 89 <222> LOCATION: (13547)..(13564)
 90 <223> OTHER INFORMATION: upstream amplification primer 4-73 SEQ ID 64
 93 <220> FEATURE:
 94 <221> NAME/KEY: allele
 95 <222> LOCATION: (13657)..(13703)
 96 <223> OTHER INFORMATION: polymorphic fragment 4-73 SEQ ID 58
 99 <220> FEATURE:
 100 <221> NAME/KEY: primer_bind
 101 <222> LOCATION: (13962)..(13981)
 102 <223> OTHER INFORMATION: downstream amplification primer 4-73 SEQ ID 67, complement
 105 <220> FEATURE:
 106 <221> NAME/KEY: misc_feature
 107 <222> LOCATION: (17997)..(18003)
 108 <223> OTHER INFORMATION: n = a, c, g, or t.
 111 <220> FEATURE:
 112 <221> NAME/KEY: misc_feature
 113 <222> LOCATION: (18196)..(18265)
 114 <223> OTHER INFORMATION: exon 2
 117 <220> FEATURE:
 118 <221> NAME/KEY: misc_feature
 119 <222> LOCATION: (19357)..(19357)
 120 <223> OTHER INFORMATION: n = a, c, g, or t.
 123 <220> FEATURE:
 124 <221> NAME/KEY: misc_feature
 125 <222> LOCATION: (23717)..(23832)
 126 <223> OTHER INFORMATION: exon 3
 129 <220> FEATURE:
 130 <221> NAME/KEY: misc_feature
 131 <222> LOCATION: (25571)..(25660)
 132 <223> OTHER INFORMATION: exon 4
 135 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/901,484A

TIME: 10:08:34

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

141 <220> FEATURE:
142 <221> NAME/KEY: allele
143 <222> LOCATION: (34469)..(34515)
144 <223> OTHER INFORMATION: polymorphic fragment 99-217 SEQ ID 25
147 <220> FEATURE:
148 <221> NAME/KEY: primer_bind
149 <222> LOCATION: (34625)..(34645)
150 <223> OTHER INFORMATION: downstream amplification primer 99-217 SEQ ID 52, complement
153 <220> FEATURE:
154 <221> NAME/KEY: misc_feature
155 <222> LOCATION: (34669)..(34759)
156 <223> OTHER INFORMATION: exon 5
159 <220> FEATURE:
160 <221> NAME/KEY: misc_feature
161 <222> LOCATION: (39083)..(39093)
162 <223> OTHER INFORMATION: n = a, c, g, or t.
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (40688)..(40846)
168 <223> OTHER INFORMATION: exon 6
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (48070)..(48193)
174 <223> OTHER INFORMATION: exon 7
177 <220> FEATURE:
178 <221> NAME/KEY: misc_feature
179 <222> LOCATION: (50182)..(54523)
180 <223> OTHER INFORMATION: exon 8
183 <220> FEATURE:
184 <221> NAME/KEY: primer_bind
185 <222> LOCATION: (51149)..(51168)
186 <223> OTHER INFORMATION: upstream amplification primer 4-65 SEQ ID 65
189 <220> FEATURE:
190 <221> NAME/KEY: allele
191 <222> LOCATION: (51448)..(51494)
192 <223> OTHER INFORMATION: polymorphic fragment 4-65 SEQ ID 59
195 <220> FEATURE:
196 <221> NAME/KEY: primer_bind
197 <222> LOCATION: (51482)..(51499)
198 <223> OTHER INFORMATION: downstream amplification primer 4-65 SEQ ID 68, complement
201 <220> FEATURE:
202 <221> NAME/KEY: primer_bind
203 <222> LOCATION: (51596)..(51613)
204 <223> OTHER INFORMATION: upstream amplification primer 4-67 SEQ ID 44
207 <220> FEATURE:
208 <221> NAME/KEY: allele

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/901,484A

TIME: 10:08:34

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

214 <221> NAME/KEY: primer_bind
 215 <222> LOCATION: (51996)..(52015)
 216 <223> OTHER INFORMATION: downstream amplification primer 4-67 SEQ ID 53, complement
 219 <220> FEATURE:
 220 <221> NAME/KEY: polyA_signal
 221 <222> LOCATION: (54445)..(54450)
 222 <223> OTHER INFORMATION: AATAAA
 225 <400> SEQUENCE: 1
 226 gtqgactctgt gactgttcgc aggaagagag gagcggggagc aggacagaca ataatgata 60
 228 gtccaggagct gggtttggag ataaagaggg aaacaagagaa agttaagttc tgtgttttca 120
 230 tggcaaaacat tgcacaaaag tttaacaactt cgtgactaac agtaatctgg ggtgattcac 180
 232 aacaaaattta cacataaaca catatttact gactttatac acagcaatcc taacgtgaac 240
 234 acagaacctg ctttatcttt tcgcacactg ttctagtgtg gagatgtctg gtctcagtta 300
 236 aagaaaagcat aagggagcatt agtttgcac actgtccaca cccgtgaact tttccacca 360
 238 gtactaaacc tagtgcttct tacagtacag ggcaatgaca gccacagaaa gagagaagct 420
 240 ccttttactg tgtaatgctt cctgctggcc ttcaaatact tgttacttga gagatctcca 480
 242 ttcaactggc ttgtcccca aaggtcatca totaccaatg atgttggtat ttgatgttaa 540
 244 tcatgtataa agaaagtagc taccatctcg gccctgatta gaacttccca ctgaaatacc 600
 246 gtccctgccta aaggtagcac aggtttccat tatggtgggt gtggggaggg ggcgggaata 660
 248 tatatatata tatatatata tatatatatg gtaaagcatt cggcattctt ttaaagtaca 720
 250 actatccttg aaaagggtta catattaaac catttttaac acagccaaag gggaggagaa 780
 252 agatccaaaa gtccctgtgga tctgctttta catcaataaa acagttatcc acccttcgta 840
 254 gcttttagtg aaggctacaa aagtatgctt tttatggatt acacatgtgc acccaactac 900
 256 ttttaattact acagaaaaaa acgaggctcc ttattaaaaa aaaatcagaa acaagtccaa 960
 258 cagactctga ggaaatgaag caagagtga ttctgaaaag gtctaataaa cagtatggaa 1020
 260 atatccttgt gggattgttc ttcagctatg cataaacatg taattatcat cattaactgt 1080
 262 atggggaaaa acacggaccc taattctgaa acacccctgg agcagagagc gggcaggagg 1140
 264 ggctgtctgc cactcagagc ggaggtctgag gaggcggcgt ccccttgcaa aggaactggc 1200
 266 gtgagcagat ggggacactc gagctgcccc gcgacctggg ccgagctgac tacaacctgg 1260
 268 gccaggtgc ctgcaagaat tagacctccg ataacgttaa caccaccttt ctcaactgtc 1320
 270 taattgtgtg catcccgggc ccagggggct tgtgagcagc aggtgcccgt tccagggcagc 1380
 272 tccagcgacc cttaaacctg accgcgcgca cgtccggccc gagggagcag aacaagaggc 1440
 274 acccggaacc tccctcgggc agcaccaccc ttcaaccagt tccgtcagtc gccaccacct 1500
 276 cccctccccc gtccgcagcc ggcccagctg gggagcatgc gcagtggccg ggcgggggtt 1560
 278 gcccgcgcca cagcaggtag ctgtactgca actgtccggc caaaaccaac aatcaagaga 1620
 280 cgtgttattg ccgcagaggt ggaactatgg caacggcgga ccaatcagaa ggcgggttgt 1680
 282 tgcggggag ccctctgccc cggcaggggg atgtggcgat ggggtagggt catgggggtg 1740
 284 gacpatccct gagcpatcga tccgggaggg ccgpggggtc ccttgctttg ccgpcggggag 1800
 286 cggcgccagc agcccgccac tcgctacccc ggcggcgggc ggcggcgggg cccatgcccg 1860
 288 tgggggggga ggctgggagc ggggtggcgg cggcgggccc gggcgccggg cggtgattgg 1920
 290 ccgcctgctg gccgcgactg aggcggggga ggcggcgggg gagcgcaggg ggagctcgct 1980
 292 gccgcggagc tgagaagatg ctgctgtccc tgggtgtcca caagtactcc atgcgctaac 2040
 294 tctgtcccag cgtcgtgtct ctgggcaagg cgcgccacct cgtgttggcc tggggggtct 2100
 296 ggcggctgt ctccgcttc ctgcggccc gcttctacca agcgtggac gacgggtgt 2160
 298 actggttcta ccagagcatg gtgctctctt tcttcagaaa ttacacgggg gtccaggtga 2220
 300 gccgctccc gctccgggt ctccggctcc acccgagctc ccaggagac ggaactctcc 2280

RAW SEQUENCE LISTING

DATE: 03/05/2002

PATENT APPLICATION: US/09/901,484A

TIME: 10:08:34

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

308	ccctcgccctg	ggtctgatgc	tgcttagcaa	agtgggtgca	gatgcacgtt	ttaaataata	2520
310	gggcacgcgt	ttagcagttt	ctggcctttg	gtccaaagag	gtggtcattg	tggaacagat	2580
312	gggagacgtc	tacactccga	agtgcgcttt	tacagtgaac	tcttgaaaca	gaagtacaat	2640
314	tgggtcttgt	gttttttccc	ctggacaagt	gaaagctggg	cgaagaaatg	aatacatttg	2700
316	ttaacccgtag	aagccctaact	agatacaatt	cttgccaaact	ttaactgggc	ttgaatgtgt	2760
318	gggtgatctg	ttgtctgatt	actttctttc	tgttactggt	tctctgtaga	gattggatto	2820
320	gtagattaaa	cttgagaaaac	aaaccataaa	agtggaaggc	cctctttaac	agtaggtatt	2880
322	tgaagtgtta	taaaaaaaaa	aaagggtgaat	ttttctttta	tttctcagtt	tgaaagaaca	2940
324	gctttattct	tggttattcc	taatgtccac	ctagtcctct	tttaactttc	ttggtagggg	3000
326	taggggtggca	tggggaaatg	ggacgggtac	attttgtctt	tttaaacttt	tttttttcca	3060
328	ccacagcagc	ctgtttttac	ctgtgtggtc	gtcaggtact	atatttagtt	tgacgttgca	3120
330	ctgctgatcg	acccttgatg	gcaccagttg	gaagttgttt	ggggggaagg	aactaggaga	3180
332	ggccaggggc	tccatttaaa	ccagtgtctg	taagtgtctc	cttggaagga	aaaaaagata	3240
334	ctgttccagg	tcattggttt	ctggtagttg	acgtttaaaa	tgggctcat	ttaaaaattt	3300
336	caataattca	ggctaatttt	ttccctttat	atggtaactc	ccaccaagtt	gtctaaatgt	3360
338	atgattttta	tcattgattaa	gtttttactt	ccacatcatg	tgacaactgg	cctgggatgg	3420
340	gatataagct	cagaacacaa	agtcattcac	ctgttaaaaa	aataatttta	tctgtggcgg	3480
342	gttatgttat	ttttgttcaa	agaggacaca	atatgatgca	gaataaccca	ttgaaggatt	3540
344	ttttggtttg	gcaagttctt	atttttttaa	atggtctgta	aacctagcag	tgtttctgaa	3600
346	attgcataac	ttacctgatg	ttcagagatc	cgattttaact	cttgatttcc	cagcaagtga	3660
348	ttttgaaaac	atttaattca	atcattccccc	ccaccgtctg	ttcaaatcaa	aggaagtggc	3720
350	atccagcact	aattttcatg	catttatgaa	aggatgcctg	aggaccctta	agtataatto	3780
352	aaaattttgt	ttaatgtgtg	ttccttgatg	aagttcttta	ggagtcttag	aacgaactga	3840
354	ttgcccactg	atcatcaaat	gcaagttatg	aacattttaat	aaaaatttaa	aaccaagagt	3900
356	ttcttgttcc	tgcattttta	tttttattgt	atggaggggga	caaataatta	ttttctgttt	3960
358	agtaacagag	cagggtattt	tgaattttat	agggtctttt	tctgcagttc	gggtttccctg	4020
360	tgtacacaaa	gctacotttc	aatatttttt	attgtttctg	ttaagattaa	atcaatagag	4080
362	gaataaatag	ctatcttcaa	acataagacc	caaaggaaaa	agattttatg	tgatgttctg	4140
364	tcacottatt	ttttacotgt	gaactttgtc	cattaaacttt	gtcactgaga	tgttttgatt	4200
366	aaaattttta	gcttgctttt	cttgttttgt	taggacaactc	tttttttctt	gaattgtttt	4260
368	tatcagcttt	cgtttgcaag	gctagtgatg	attctcttgt	tctgtataaa	gtattgttga	4320
370	ctcattttctg	aagggagttt	tagtaattta	agaggttata	agttttttaa	taaaaggttt	4380
372	attaattttat	atatattaaa	gaggcatttt	aaaataaaaat	ttttttttaa	tgacattttt	4440
374	acacctttca	actctagggt	taaaaaataa	gtggttcaca	gtagttcttg	cagaagaata	4500
376	ttttctttta	catagaattt	ttaagctgaa	gagaagtagt	agtaggtcca	tgagatttat	4560
378	gatctgtgtc	tggcaggtaa	acctgcttcc	aacaaaattta	gttggtattt	tcttggtatto	4620
380	tgggtaaaata	cctttttctt	cccagtttcc	actactttat	tttccatagt	atctctgaga	4680
382	tagagaaaata	tttcagtcag	tgctgctaaa	attgttctct	ataactcgtt	tatcttttta	4740
384	ggctccttcca	gaatctctca	ttggtactga	aaotcaaatg	ggtaactttc	tcacatttta	4800
386	ttttctttaga	ataagtaata	agaattttat	aagctttttt	atatttcaag	taatttgaga	4860
388	ctatttgaaaa	tccagtttaag	tctctctact	gtgttgagag	gcattgatto	aagtaacctg	4920
390	gttaactttcc	tgtgctgcca	aaacagatca	cctcaaaacta	agcggcttaa	aataatagaa	4980
392	cttaagttct	cgtgattctg	gaggccagca	ctttgaaatc	aagggttagg	ctcaatttta	5040
394	ctccctctgg	aggccctagg	gggaactctg	tcttggtggg	ttcaactttc	ggtgaactgt	5100
396	ggcatttctt	ggcttggggc	cccatcactt	caacctctgc	cttacagttc	ttgtgtccac	5160
398	ctcttctgtc	tcacatctca	ctctcccttt	ctcttagaag	gatgcttctc	attggattta	5220

VERIFICATION SUMMARY

DATE: 03/05/2002

PATENT APPLICATION: US/09/901,484A

TIME: 10:08:35

Input Set : D:\GEN-T111XC3D2.ST25.txt

Output Set: N:\CRF3\03052002\I901484A.raw

L:824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:870 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:1528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:2372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:3353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:4381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:4637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:4845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:4847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:4887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:4993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5021 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5023 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5025 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5029 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:5301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:13038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182
L:13086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182
L:13297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13867 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:13871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183
L:14541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183